

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,805	02/25/2004	Toshiyuki Tanaka	F-8136	3344
28107 7:	590 01/25/2006		EXAM	INER
JORDAN AN	D HAMBURG LLP		KNABLE, GEOFFREY L	
SUITE 4000			ART UNIT	PAPER NUMBER
NEW YORK,	NY 10168		1733	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		ll l				
	Application No.	Applicant(s)				
	10/786,805	TANAKA ET AL.				
Office Action Summary	Examiner	Art Unit				
·	Geoffrey L. Knable	1733				
The MAILING DATE of this communication  Period for Reply	on appears on the cover sheet with	the correspondence address				
A SHORTENED STATUTORY PERIOD FOR F WHICHEVER IS LONGER, FROM THE MAILII  - Extensions of time may be available under the provisions of 37 of after SIX (6) MONTHS from the mailing date of this communicated. If NO period for reply is specified above, the maximum statutory.  Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	NG DATE OF THIS COMMUNICA CFR 1.136(a). In no event, however, may a repion. period will apply and will expire SIX (6) MONTHY statute, cause the application to become ABAN	ATION. y be timely filed IS from the mailing date of this communication. IDONED (35 U.S.C. § 133).				
Status .						
1) Responsive to communication(s) filed on						
2a) This action is <b>FINAL</b> . 2b)	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice ur	nder <i>Ex parte Quayle</i> , 1935 C.D.	I1, 453 O.G. 213.				
Disposition of Claims						
4) ☐ Claim(s) 1-4 is/are pending in the application 4a) Of the above claim(s) is/are with 5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-4 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction	thdrawn from consideration.					
Application Papers						
9) The specification is objected to by the Exact 10) The drawing(s) filed on is/are: a) Applicant may not request that any objection Replacement drawing sheet(s) including the county The oath or declaration is objected to by the specific sp	accepted or b) objected to by to the drawing(s) be held in abeyance correction is required if the drawing(s)	e. See 37 CFR 1.85(a). is objected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of:  1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the application from the International E * See the attached detailed Office action for	iments have been received. iments have been received in App e priority documents have been re Bureau (PCT Rule 17.2(a)).	olication No eceived in this National Stage				
Attachment(s)  Notice of References Cited (PTO-892)	4) ☐ Interview Sur	nmary (PTO-413)				
<ul> <li>Notice of References Cited (PTO-692)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-94)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/94)</li> <li>Paper No(s)/Mail Date 6-1-2004.</li> </ul>	Paper No(s)/f	Mail Date rmal Patent Application (PTO-152)				

Application/Control Number: 10/786,805

Art Unit: 1733

1. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 4, reference is made to unwinding a "ribbon-shaped ply cord" from a roll of "the ply cord"- this use of the term "ply cord" to apparently denote a ply that includes cords therein is however considered to be arguably misleading and confusing. In other words, a "cord" is normally understood in this art to be a single reinforcing element, a plurality of which are usually embedded within a ply. A "ply cord" would thus normally be understood to be a single cord for use in a ply - since this is apparently not what is intended here, clarification is required to avoid any ambiguity in this regard.

In line 3 of both claims 1 and 4, the phrase "as conveying..." is grammatically awkward and confusing. It seems that "as" may have been intended to be "and".

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

Application/Control Number: 10/786,805

Art Unit: 1733

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Senbokuya et al. (US 6,616,783) taken in view of Ogawa (US 6,355,126) and Baugher et al. (US 4,087,308).

Senbokuya et al. discloses a tire ply forming method and apparatus in which a narrow ribbon ply (including cords therein) is fed, cut into strips which are each then transferred onto a bonding base (22) and overlapped with adjacent strips, the overlap joint then being stitched or pressed using a stitching roll (e.g. col. 4, lines 43-60). This patent is therefore considered to suggest a process/apparatus as claimed except that it does not disclose feeding the ribbon from a roll and does not expressly describe transporting with a transfer device.

As to feeding from a roll rather than direct forming/feeding as disclosed in Senbokuya et al., Ogawa is also directed to forming tire plies by successive application of cut strips and evidences an understanding in this art that such strips can be supplied either immediately after forming or from a wound roll - note esp. col. 4, lines 16-21. To unwind a previously formed ribbon/strip in Senbokuya et al. rather than directly forming/applying it would therefore have been seen by the ordinary artisan to have been an obvious alternative leading to only the expected results.

As to transporting with a transfer device, it is considered that the ordinary artisan would have found it obvious to use a device to effect the transfer schematically shown by Senbokuya et al. for the obvious advantages that would be expected to flow from

Art Unit: 1733

avoiding a manual operation. Note also Baugher et al., which is also directed to forming tire plies by assembling plural cut strips, this reference evidencing the known and conventional nature of a transfer means to transport a strip to an assembly location - note device 13. It is noted that this reference also further shows the conventional use of a stitching roller (475) operable by a moving device to press the overlapped ply edges, use of a moving device as required by claim 3 being obvious to effect the stitching desired by Senbokuya et al. The particular number of rollers used is considered to have been well within the selection skill of the ordinary artisan, any particular selection thereof being considered to provide none but the expected results.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Alderfer (US 3,826,297), Inoue et al. (US 4,219,601) and Suda et al. (US 2003/0051794) are other examples of forming tire plies by assembling plural cut strips but are at present no more relevant than the applied prior art.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571
272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Business Center (EBC) at 866-217-9197 (toll-free).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Primary Examiner

Art Unit 1733

G. Knable January 21, 2006

Art Unit: 1733